Amendment to the Claims

1-12. (Cancelled)

13. (New) A plasma processing method comprising:

supplying electric power to one of a first and second electrode;

making the other of the first and second electrode have a ground potential, or making the other of the first and second electrode have a floating potential while supplying gas to a plasma source arranged in the vicinity of an object to be processed at a pressure in the vicinity of atmospheric pressure; and

processing a part of the object to be processed with a plasma, while supplying electric power to at least one of the first electrode and the second electrode, wherein a length in any direction of an area of a surface of the potentially controlled first or second electrode, which is arranged in a position opposite to the plasma source via the object to be processed, is smaller than an area of a surface of the plasma source superposed on the object to be processed.

14. (New) The plasma processing method as claimed in claim 13, wherein the second electrode is constructed of a plurality of electrodes, and the object to be processed is processed with a plasma in a configuration to be processed by selectively potentially controlling the plurality of electrodes.

15. (New) The plasma processing method as claimed in claim 13, wherein the second electrode is constructed of a plurality of microelectrodes, and the object to be processed is processed with a plasma in a desired configuration by selectively potentially controlling the microelectrodes.

16. (New) The plasma processing method as claimed in claim 13, wherein the second electrode is constructed by arranging a plurality of potentially controlled electrodes, and the object to be processed is processed with a plasma into configuration to be processed by selectively bringing arbitrary microelectrodes close to the object to be processed.

17. (New) The plasma processing method as claimed in claim 13, wherein the object to be processed has a substrate or a thin film of a volume resistivity of not smaller than 10-6 (Ω-cm).

18. (New) The plasma processing method as claimed in claim 13, wherein the object to be processed has a substrate or a thin film of a volume resistivity of not smaller than 10-8 (Ω-cm).

19. (New) The plasma processing method as claimed in claim 13, wherein positions of the plasma source and the potentially controlled second electrode are displaced relative to the object to be processed.

20. (New) The plasma processing method as claimed in claim 13, wherein the gas includes at least any one of inert gases of He, Ar, Ne, and Xe.

21. (New) The plasma processing method as claimed in claim 13, wherein the gas includes a gas of CxFy (x and y are natural numbers) such as SF_6, and CF_4, N_3, O_2, $C1_2$, or a halogen containing gas of HBr or the like as reactive etching gas.

22. (New) A plasma processing method comprising:

providing an object to be processed between a plasma source and a second electrode, wherein the plasma source includes a first electrode and the second electrode is potentially controlled in a position opposite to the plasma source; and

supplying a high-frequency electric power to the first electrode while supplying gas from a gas supply unit to the object to be processed at a pressure in the vicinity of atmospheric pressure to generate plasma on a part of the object to be processed,

wherein the area of the surface of the potentially controlled second electrode that is superposed on the object to be processed is smaller in any direction than an area of the opposing side of the object.

23. (New) The plasma processing method as claimed in claim 22, wherein the potentially controlled second electrode comprises a plurality of electrodes, and the object to be processed is processed by selectively potentially controlling the plurality of electrodes.

24. (New) The plasma processing method as claimed in claim 22, wherein the second electrode comprises a plurality of microelectrodes, and the object to be processed is processed by potentially controlling selected ones of the microelectrodes.

25. (New) The plasma processing method as claimed in claim 22, wherein the second electrode comprises a plurality of potentially controlled electrodes, and the object to be processed is processed by selectively bringing arbitrary ones of the potentially controlled electrodes close to the object to be processed.

26. (New) The plasma processing method as claimed in claim 22, wherein the object to be processed has a substrate or a thin film of a volume resistivity of not smaller than 10-6 (Ω-cm).

27. (New) The plasma processing method as claimed in claim 22, wherein the object to be processed has a substrate or a thin film of a volume resistivity of not smaller than 10-8 (Ω-cm).

28. (New) The plasma processing method as claimed in claim 22, wherein positions of the plasma source and the potentially controlled second electrode can be displaced relative to the object to be processed.

29. (New) The plasma processing method as claimed in claim 22, wherein the gas includes at least any one of inert gases of He, Ar, Ne, and Xe.

30. (New) The plasma processing method as claimed in claim 22, wherein the gas includes a gas of CxFy (x and y are natural numbers) such as SF_6, and CF_4, N_3, O_2, $C1_2$, or a halogen containing gas of HBr or the like as reactive etching gas.